

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Orthopedics

**Manuscript NO:** 35773

**Title:** Evaluation of more than 1000 Titanium Nitride coated Mobile bearing Total Knee Arthroplasties.

**Reviewer's code:** 02706155

**Reviewer's country:** China

**Science editor:** Fang-Fang Ji

**Date sent for review:** 2017-08-07

**Date reviewed:** 2017-08-09

| CLASSIFICATION   | LANGUAGE EVALUATION  | SCIENTIFIC MISCONDUCT                          | CONCLUSION   |
|--|--|--|--|
| <input type="checkbox"/> Grade A: Excellent            | <input checked="" type="checkbox"/> Grade A: Priority publishing     | Google Search:                                 | <input checked="" type="checkbox"/> Accept             |
| <input checked="" type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing           | <input type="checkbox"/> The same title        | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good                 | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection                     |
| <input type="checkbox"/> Grade D: Fair                 | <input type="checkbox"/> Grade D: Rejected                           | <input type="checkbox"/> Plagiarism            | <input type="checkbox"/> Minor revision                |
| <input type="checkbox"/> Grade E: Poor                 |  | <input type="checkbox"/> No                    | <input type="checkbox"/> Major revision                |
|  |  | BPG Search:                                    |  |
|  |  | <input type="checkbox"/> The same title        |  |
|  |  | <input type="checkbox"/> Duplicate publication |  |
|  |  | <input type="checkbox"/> Plagiarism            |  |
|  |  | <input type="checkbox"/> No                    |  |

## COMMENTS TO AUTHORS

The author's effort should be appreciated. Even a mid-term follow-up result could provide reference. Anyway, research for novel materials for artificial joint need encouragement.

**Answers to reviewer:**

Thank you for the time you have taken

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Orthopedics

**Manuscript NO:** 35773

**Title:** Evaluation of more than 1000 Titanium Nitride coated Mobile bearing Total Knee Arthroplasties.

**Reviewer's code:** 02699644

**Reviewer's country:** New Zealand

**Science editor:** Fang-Fang Ji

**Date sent for review:** 2017-08-07

**Date reviewed:** 2017-08-10

| CLASSIFICATION                                    | LANGUAGE EVALUATION  | SCIENTIFIC MISCONDUCT                          | CONCLUSION   |
|---|--|--|--|
| <input type="checkbox"/> Grade A: Excellent       | <input checked="" type="checkbox"/> Grade A: Priority publishing     | Google Search:                                 | <input checked="" type="checkbox"/> Accept             |
| <input type="checkbox"/> Grade B: Very good       | <input type="checkbox"/> Grade B: Minor language polishing           | <input type="checkbox"/> The same title        | <input type="checkbox"/> High priority for publication |
| <input checked="" type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection                     |
| <input type="checkbox"/> Grade D: Fair            | <input type="checkbox"/> Grade D: Rejected                           | <input type="checkbox"/> Plagiarism            | <input type="checkbox"/> Minor revision                |
| <input type="checkbox"/> Grade E: Poor            |  | <input type="checkbox"/> No                    | <input type="checkbox"/> Major revision                |
|   |  | BPG Search:                                    |  |
|   |  | <input type="checkbox"/> The same title        |  |
|   |  | <input type="checkbox"/> Duplicate publication |  |
|   |  | <input type="checkbox"/> Plagiarism            |  |
|   |  | <input type="checkbox"/> No                    |  |

## COMMENTS TO AUTHORS

This retrospective study has all the limitations of such studies including a short follow up (4 years) to comment on survival but as it stands is comprehensive and gives a reasonable account of the early results using a TiN implant with a good discussion on the implications of this prosthesis. i would favour publication without significant changes

**Answers to reviewer:**

Thank you for the time you have taken

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Orthopedics

**Manuscript NO:** 35773

**Title:** Evaluation of more than 1000 Titanium Nitride coated Mobile bearing Total Knee Arthroplasties.

**Reviewer's code:** 00467030

**Reviewer's country:** Taiwan

**Science editor:** Fang-Fang Ji

**Date sent for review:** 2017-08-21

**Date reviewed:** 2017-08-23

| CLASSIFICATION                              | LANGUAGE EVALUATION  | SCIENTIFIC MISCONDUCT                          | CONCLUSION   |
|---|--|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing                | Google Search:                                 | <input type="checkbox"/> Accept                        |
| <input type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing           | <input type="checkbox"/> The same title        | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good      |  | <input type="checkbox"/> Duplicate publication |  |
| <input type="checkbox"/> Grade D: Fair      | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Plagiarism            | <input type="checkbox"/> Rejection                     |
| <input type="checkbox"/> Grade E: Poor      | <input type="checkbox"/> Grade D: Rejected                           | <input type="checkbox"/> No                    | <input type="checkbox"/> Minor revision                |
|   |  | BPG Search:                                    | <input type="checkbox"/> Major revision                |
|   |  | <input type="checkbox"/> The same title        |  |
|   |  | <input type="checkbox"/> Duplicate publication |  |
|   |  | <input type="checkbox"/> Plagiarism            |  |
|   |  | <input type="checkbox"/> No                    |  |

## COMMENTS TO AUTHORS

This is a retrospective evaluation of 1031 primary titanium nitride coated mobile bearing total knee arthroplasties in an orthopedic clinic. The content would have potential merit to the readers. The following two points are suggested for further consideration. 1. The title is suggested to be modified as "Evaluation of 1031 primary titanium nitride coated mobile bearing total knee arthroplasties in an orthopedic clinic". 'More than 1000' is not accurate, to my opinion. 2. Line 74: "This TiN TKA has been used in several clinics the last decade." would need citation(s) to verify this statement.

**Answers to reviewer:**

Thank you for the time you have taken

1. title is changed to the title you suggested

2. This TiN TKA has been used in several clinics the last decade. Yet, little is published



**Baishideng  
Publishing  
Group**

7901 Stoneridge Drive, Suite 501,  
Pleasanton, CA 94588, USA

**Telephone:** +1-925-223-8242

**Fax:** +1-925-223-8243

**E-mail:** [bpgoffice@wjgnet.com](mailto:bpgoffice@wjgnet.com)

**<https://www.wjgnet.com>**

or reported about the clinical outcome and survival[2-4].

## JOURNAL EDITOR-IN-CHIEF'S REVIEW REPORT

**Name of journal:** World Journal of Orthopedics

**Manuscript NO:** 35773

**Title:** Evaluation of 1031 primary titanium nitride coated mobile bearing total knee arthroplasties in an orthopedic clinic

**Journal Editor-in-Chief (Associate Editor):** Qianjun (Trey) Cui

**Country:** United States

**Editorial Director:** Xiu-Xia Song

**Date sent for review:** 2017-10-27

**Date reviewed:** 2017-10-28

| ACADEMIC CONTENT<br>EVALUATION              | LANGUAGE QUALITY<br>EVALUATION  | CONCLUSION  |
|---|---|---|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing                   | <input type="checkbox"/> Accept                           |
| <input type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing              | <input type="checkbox"/> High priority for<br>publication |
| <input type="checkbox"/> Grade C: Good      | <input type="checkbox"/> Grade C: A great deal of<br>language polishing | <input type="checkbox"/> Rejection                        |
| <input type="checkbox"/> Grade D: Fair      | <input type="checkbox"/> Grade D: Rejected                              | <input type="checkbox"/> Minor revision                   |
| <input type="checkbox"/> Grade E: Poor      |   | <input type="checkbox"/> Major revision                   |

## JOURNAL EDITOR-IN-CHIEF (ASSOCIATE EDITOR) COMMENTS TO AUTHORS

Overall this is an interesting study with good quality and should be accepted for publication after minor revision.

*Thank you very much*

In abstract: Methods and Results sections need to be edited and re-arranged to truly present Methods and Results. "At a mean follow-up of 46 mo (range 1-92) the overall implant survival was 97.7% and 95.1% for any operative reason related to the implant. Twenty-three knees (2.2%) required revision surgery. Arthrofibrosis was the most common indication for a re-operation." should be moved to Results section,

*Done:*

while " Clinical evaluation and patient-reported outcomes (VAS-pain, VAS-satisfaction, EQ-5D and KOOS) were gathered one year after surgery," should be in the Methods section and should be further described in details.

### METHODS

*A total of 910 patients (338 men; 572 woman), with a mean age of 65 (range 36-94) undergoing 1031*

*primary TKAs were assessed. Clinical evaluation and patient-reported outcomes were gathered one year after surgery. The questionnaires included the Knee injury and Osteoarthritis Outcome Score (KOOS)-Dutch version, Visual Analogue Scale (VAS) pain scores in rest and during active knee movement, VAS-satisfaction scores, and EQ-5D-3L health scores. This was aimed to assess the overall knee function and patient satisfaction, and to enable us to make a gross comparison to other TKAs.*

## RESULTS

*At a mean follow-up of 46 mo (range 1-92) the overall implant survival was 97.7% and 95.1% for any operative reason related to the implant. Twenty-three knees (2.2%) required revision surgery. Arthrofibrosis was the most common indication for a re-operation. The clinical evaluation and patient-reported outcomes revealed good to excellent patient satisfaction and function of the arthroplasty. The median postoperative VAS-pain scores on a scale of 0-100, at one year after surgery were 1 in rest and 2 during movement.*

In the Results section, more detailed information should be included in terms of functional outcomes.

*Done:*

*Clinical outcomes at 1 year after surgery*

*A total of 671 patients (65%) had filled out the questionnaires at one year after primary TKA (Table 1). The KOOS measured at 1 year after surgery showed generally good levels of function during activities of daily life (ADL), pain, and symptoms with a median scores of 89 (IQR: 70-97), 92 (IQR: 72-100), 86 (IQR: 71-93), respectively. The domains "sport/rec" and "QoL" had median values of 40 (IQR: 15-70) and 69 (IQR: 50-88), respectively. In all but the "sports and recreational function" subscale of the KOOS, patients without required revision surgery scored significant higher scores ( $P$ -value  $< 0.01$ ) then the revision group (Table 1).*

*The median postoperative VAS-pain scores on a scale of 0-100, at one year after surgery were 1 in rest and 2 during movement of the joint in the non-revision group. The patients that required a revision operation scored significantly higher VAS scores during activity ( $P = 0.03$ ).*

*Overall patient satisfaction levels were good, revealing a median VAS-satisfaction score of 91 (IQR 70-100) out of 100 in the non-revised, versus 45 (IQR: 14-38) out of 100 in the revision group at one year following primary surgery. This difference was statistically significant ( $P < 0.01$ ).*

*At one year after surgery patients reported high levels of health-related quality of life. There was a significant difference ( $P < 0.01$ ) in the EQ-5D scores between the revised and non-revised TKA scores, with the revision group showing lower scores corresponding with a lower quality of life (Table 1).*

TKA's should be TKAs throughout the entire manuscript.



**Baishideng  
Publishing  
Group**

7901 Stoneridge Drive, Suite 501,  
Pleasanton, CA 94588, USA  
**Telephone:** +1-925-223-8242  
**Fax:** +1-925-223-8243  
**E-mail:** bpgoffice@wjgnet.com  
**https://** www.wjgnet.com

*Done*

In article highlights section, the Research methods and Research results sections should be modified accordingly as suggested above.

*This is always difficult to be precise and to the point or to be too lengthy  
Is this what you had in mind?*

*Research methods*

*A total of 910 patients (338 men; 572 woman), with a mean age of 65 (range 36-94) undergoing 1031 primary TKAs were assessed. Clinical evaluation and patient-reported outcomes were gathered one year after surgery. The questionnaires included the Knee injury and Osteoarthritis Outcome Score (KOOS)-Dutch version, Visual Analogue Scale (VAS) pain scores in rest and during active knee movement, VAS-satisfaction scores, and EQ-5D-3L health scores. This was aimed to assess the overall knee function and patient satisfaction, and to enable us to make a gross comparison to other TKAs.*

*Research results*

*At a mean follow-up of 46 mo (range 1-92) the overall implant survival was 97.7% and 95.1% for any operative reason related to the implant. Twenty-three knees (2.2%) required revision surgery. Arthrofibrosis was the most common indication for a re-operation. The clinical evaluation and patient-reported outcomes revealed good to excellent patient satisfaction and function of the arthroplasty. The median postoperative VAS-pain scores on a scale of 0-100, at one year after surgery were 1 in rest and 2 during movement.*

*Kind regards and thank you very much for your time*

*Stefan Breugem, on behalf of all the authors*